6. A method for producing a steered acoustic beam, the method comprising the steps of:

providing three or more ultrasonic acoustic wave transmitters, each producing an ultrasonic acoustical wave that has a wavelength and a phase;

positioning the three or more ultrasonic acoustic wave transmitters in a linear array spaced within one wavelength of an adjacent transmitter; and

adjusting the relative phase of selected acoustic wave transmitters to produce a steered acoustic beam.

7. A method according to claim 6 further comprising the steps of:

receiving a reflected acoustic signal generated by the reflection of the steered acoustic beam off an object; and

determining at least one of range, angular extent and angular direction of the object from the reflected steered acoustic beam.

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